What is claimed is

1. A method of producing the image of the internal structure of an object by X-rays, when the object is irradiated by the X-rays, and the output signals of one or more detectors of radiation are used to get the information about the substance density of the object, wherein the X-rays is concentrated in a zone within the object's (5) area (7) under investigation; said zone includes the point (4), the current results of measurements are referred to; secondary radiation arising in said zone is directed to one or more detectors (6);

scanning of said object's (5) area (7) under study is carried out by the movement of said zone;

the density of the object's substance in said point is rated on the set f values of the secondary radiation intensities obtained by means of one or more detectors (6), and determined simultaneously with coordinates of said point (4), current results of measurements are referred to, in the zone of concentration of X-ray radiation;

pattern of distribution of the substance density in said object's (5) area (7) under study is reconstructed on the base of values of density jointly with the corresponding values of coordinates.

2. The method of claim 1, wherein

X-rays is concentrated in the zone (16), including the point, current results of measurements are referred to, placed in the object's area under study, by means of one or more collimators (13, 18), using corresponding number of X-ray sources spaced apart (1);

arising secondary radiation is directed to one or more detectors (6, 20) by one or more collimators (15,19) as well;

thus all collimators are oriented in a way that axes of their central channels are crossed in said point, current results of measurements are referred to.

3. The method of claim 1, wherein

X-rays is concentrated in the zone (16), including the point, current results of measurements are referred to, by means of one or more X-ray half-lenses (21), transferring the divergent radiation of corresponding number of X-ray sources (1), spaced apart, to quasi-parallel;

arising secondary radiation is directed to one or more detectors (6, 20) by means of one or more X-ray half-lenses (22, 23), focusing said radiation on the detectors or forming quasi-parallel radiation;

thus all X-ray half-lenses are oriented in a way that their optic axes are crossed in the point, current results of measurements are referred to.

4. The method of claim 1, wherein

X-rays is concentrated in the zone (16), including the point, current results of measurements are referred to, by means of one or more X-ray half-lenses (21), transferring the divergent radiation of corresponding number of X-ray sources (1), spaced apart, to quasi-parallel;

arising secondary radiation is directed to one or more detectors (6) by means of one or more X-ray lenses (3), focusing said radiation on the detectors (6);

thus all X-ray half-lenses and lenses are oriented in a way that their optic axes are crossed in the point, current results of measurements are referred to.

5. The method of claim 1, wherein

X-rays is concentrated in the zone (16), including the point, current results of measurements are referred to, placed within the area under study, by means of one or more X-ray half-lenses (21), transferring the divergent radiation of corresponding number of X-ray sources (1), spaced apart, to quasi-parallel;

arising secondary radiation is directed to one or more detectors (20) by means of one or more collimators (19);

thus X-ray half-lenses and collimators are oriented in a way that the optic axes of the half-lenses and the central channels of the collimators are crossed in the point, current results of measurements are referred to.

6. The method of claim 1, wherein

X-rays is concentrated in the zone (4), including the point, current results of measurements are referred to, placed within the area under study, by means of one or more X-ray sources (1) and corresponding number of X-ray lens (2), focusing the divergent X-rays of each source (1) in said point (4) current results of measurements are referred to;

arising secondary radiation is directed to one or more detectors (6) by means of X-ray lenses (3), focusing said radiation on the detectors (6) and having the second focus in said point.

7. The method of claim 1, wherein

X-rays is concentrated in the zone (4), including the point, current results of measurements are referred to, placed within the area under study, by means of one or more X-ray sources (1), using one or more X-ray sources 91), spaced apart, and corresponding number of X-ray lenses (2), focusing the divergent X-rays of each source (1) in said point (4), current results of measurements are referred to;

arising secondary radiation is directed to one or more detectors (6, 20) by means of collimators (15, 19), oriented in a way that the optic axes of their central channels cross in said point.

8. A device for producing the image of the internal structure of an object by X-rays, comprising:

a means for positioning (10) of the object under study (5);

X-ray system (8);

a means for relative displacement of the means for positioning (10) of the object under study (5) and the X-ray system (8);

a means (12) for data processing and image, wherein

the X-ray system (8) comprises one or more X-ray sources (1);

means for concentrating (2) of radiation of said one or more X-ray sources (1) in the zone, including the point (4), current results of measurements are referred to;

one or more means (3) for arising secondary radiation;

detectors (6) of said radiation, placed at the outputs of said means (3);

outputs of said detectors is connected to the means (12) for data processing and image;

detectors (11) for determination the coordinates of the point (4) are connected with the means for positioning (1) of the object (5) under study and X-ray system (8);

said point (4) within the object's (5) area under study, said measurement results are referred to;

said detectors (11) are connected by their outputs to the means (12) for data processing and image.

9. The device of claim 8, wherein X-ray system comprises several X-ray sources (1; 17);

each means for the said sources radiation concentrating in the zone (16), including the point, the current results of measurements are referred to, and each means for directing the secondary radiation, arising in said point, to detectors (6/ 20) are made as a collimator (13, 15, 18, 19);

the said collimator have the channels, oriented in the zone (16) of concentration of the radiation of the said X-ray sources;

thus the optical axes of the central channels of all collimators cross in the point, the current results of measurements are referred to.

10. The device of claim 9, wherein X-ray sources (1), comprised in the X-ray source, are quasi-pointed;

collimators (13, 15) have the channels, focused on said sources and being divergent to the means for positioning the object (5) under study;

a screen (4) with an aperture is placed between the output of each X-ray source (1) and the input of corresponding collimator (13).

11. The device of claim 9, wherein X-ray sources (17), comprised in the X-ray system, are extended;

collimators (18, 19) have channels, narrowing to the means for positioning the object under study.

12. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray half-lens (21), transferring the divergent radiation of the corresponding source (1) to quasi-parallel;

each means for arising secondary radiation transporting to the detector (6) is made as X-ray half-lens (22), focusing said radiation on the detector (6);

thus optic axes of all X-ray half-lenses cross in the point, the current results of measurements are referred to.

13. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray half-lens (21), transferring the divergent radiation of the corresponding source (1) to quasi-parallel;

each means for arising secondary radiation transporting to the detector is made as X-ray half-lens (23), forming quasi-parallel radiation and having the focus in the zone (16) of radiation concentration;

thus optic axes of all X-ray half-lenses cross in the point, the current results of measurements are referred to.

14. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray half-lens (21), transferring the divergent radiation of the corresponding source (1) to quasi-parallel;

each means for arising secondary radiation transporting to the detector (6) is made as X-ray lens (3), focusing said radiation on the detector (6) and having the second focus in the zone (16) of radiation concentration;

optic axes of all X-ray half-lenses and lenses cross in the point, the current results of measurements are referred to.

15. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray half-lens (21), transferring the divergent radiation of the corresponding source (1) to quasi-parallel;

each means for arising secondary radiation transporting to the detector (20) is made as a collimator (19) with channels, diverging to the corresponding detector;

optic axes of all X-ray lenses, half-lenses, and the central channels of the collimators cross in the point, the current results of measurements are referred to.

16. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray half-lens (21), transferring the divergent radiation of the corresponding source to quasi-parallel;

each means for arising secondary radiation transporting to the detector (6) is made as a collimator (16) with the channels, converging to the corresponding detector;

optic axes of all X-ray half-lenses and the central channels of the collimators cross in the point, the current results of measurements are referred to.

17. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone, including the point (4), the current results of measurements are referred to, is made as X-ray lens (2), focusing the divergent radiation of X-ray source (1);

each means for arising secondary radiation transporting to the detector (6) is made as X-ray lens (3), focusing said radiation on the corresponding detector;

optic axes of all X-ray lenses cross in the point, the current results of measurements are referred to.

18. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray lens (2), focusing the divergent radiation of X-ray source (1);

each means for arising secondary radiation transporting to the detector (6) is made as the collimator (15) with the channels, converging to the corresponding detector;

optic axes of all X-ray lenses and the central channels of the collimators cross in the point, the current results of measurements are referred to.

19. The device of claim 8, wherein the X-ray sources (1), comprised in the X-ray system, are quasi-pointed;

each means for X-ray concentration in the zone (16), including the point, the current results of measurements are referred to, is made as X-ray lens (2), focusing the divergent radiation of X-ray source (1);

each means for arising secondary radiation transporting to the detector (20) is made as the collimator (19) with the channels, diverging to the corresponding detector;

thus optic axes of all X-ray lenses and the central channels of the collimators cross in the point, the current results of measurements are referred to.